	Type	#	Hits	Search Text	DBs
H	BRS	L1	16277	temperature and LCD	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
2	BRS	L2	2604	scanning near pulse	-SN
3	BRS	Г3	14917	scanning near signal	us-
4	BRS	L4	28913	gate adj voltage	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
5	BRS	1.5	8806	gate adj pulse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
9	BRS	91	53976	2 or 3 or 4 or 5	I; US- JPO; TDB
7	BRS	Г.7	782	1 and 6	US- PO; 3
8	BRS	Г.8	244	345/101.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
9	BRS	61	2197	345/87.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
10	BRS	L10	18513	temperature adj variation	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
11	BRS	L11	66463	temperature near change	дд
12	BRS	L12	82193	10 or 11	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB

	туре	# 1	Hits	Search Text	DBs
13	BRS	BRS L13	2419	8 or 9	
١4	BRS L14	L14	40	12 and 13 and 6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB

	Document	ΩI	Issue Date	Pages	Title	Current OR	Current XRef
П	1	7241	20020516	42	Liquid crystal display device	345/87	
5	US 20020057238 A1	7238	20020516	74	Liquid crystal display apparatus	345/87	
е	US 20010040543 A1	0543	20011115	11	Charge characteristic compensating circuit for liquid crystal display panel	345/87	
4	US 6496170	B1	20021217	29	crystal appa	345/87	345/101; 345/204; 345/206; 345/214; 345/92; 345/94; 345/99; 345/99; 349/172; 349/172; 349/33;
رى ا	US 6452581	B1	20020917	19	m :	345/101	345/97
9	US 6414666	B1	20020702	31	Liquid crystal display device and method of driving a liquid crystal display element	345/95	345/87; 345/89; 345/94
7	US 6333728	B1	20011225	10	Method and apparatus for real-time on-off contrast ratio optimization in liquid crystal displays	345/90	345/87 ; 349/72
ω	US 6329976	B1	20011211	7	Electro-optical display device with temperature-dependent drive means	345/101	•
0	US 6326943	B1	20011204	65	Display device	345/101	345/97 ; 349/72

	Document ID	Issue Date	Pages	Title	Current OR	Current XRef
10	US 6320571 B1	20011120	19	Bistable liquid crystal display device	345/204	345/205; 345/210; 345/211; 345/87; 345/88; 345/92; 345/95;
11	US 6075511 A	20000613	19	Drive voltages switched depending upon temperature detection of chiral smectic liquid crystal displays	345/101	45/945/9
12	US 6067062 A	20000523	85	Light valve device	345/87	5
13	US 6037920 A	20000314	16	Liquid crystal apparatus and driving method therefor	345/87	345/101; 345/691; 345/94; 349/72
14	US 6020867 A	20000201	204	Display apparatus	345/87	345/905
15	US 5936604 A	19990810	25	liquid crystal tus and method g the same	345/101	345/87; 345/88
16	US 5852430 A	19981222	19	Color liquid crystal display device	345/101	345/88
17	5754154	19980519	49	crystal tus	5/	345/101
18	US 5748171 A	19980505	22	Liquid crystal display	345/101	345/88
19	US 5734367 A	19980331	F	Liquid crystal apparatus	345/101	345/99
20	571742	19980210	49	Liquid crystal display apparatus	345/101	345/100; 345/98
21	US 5675356 A	19971007	29	Driving apparatus	345/101	5/
22	US 5657037 A	19970812	20	appar	345/94	345/78 ; 345/87
23	US 5602562 A	19970211	55	Liquid crystal apparatus and driving method	345/101	345/97

	Doc	Document ID	Ω	Issue Date	Pages	Title	Current OR	Current XRef
24	5	92190		970	39	Liquid crystal display apparatus and drive method	345/89	345/101; 345/97
25	US 5	506600 A		19960409	29	pparat	345/101	345/100
26	US 54	5471229 A		19951128	22	Driving method for liquid crystal device	345/89	345/101
27	US 53	5317332 A	•••••	19940531	20	riving apparatus for an lectrode matrix suitable for	345/101	345/94
						٦ :		
28	US 52	283564 A		19940201	12	d cry ratur ulati	345/87	345/94; 349/72
29	US 52	250937 A	***************************************	19931005	56	Half tone liquid crystal display circuit with an A.C. voltage divider for drivers	345/89	345/101; 345/94
30	US 52.	233446 A		19930803	70	Display device	345/87	345/95
31	US 50	5041821 A		19910820	54	Ferroelectric liquid crystal apparatus with temperature dependent DC offset voltage	345/101	345/94; 349/34; 349/37; 349/72
32	US 50	5033822 A		19910723	10	Liquid crystal apparatus with temperature compensation control circuit	345/101	345/97; 349/72
33	US 49	4962376 A	•••••••••••••••••••••••••••••••••••••••	19901009	70	Display control apparatus having a plurality of driving voltage supplying means	345/97	345/101
34	US 49	952032 A		19900828	82	Display device	345/101	349/72
35	US 49	4923285 A		19900508	36	Drive apparatus having a temperature detector	345/101	345/97; 349/37; 349/72
36	US 49	4902107 A		19900220	16	Ferroelectric liquid crystal optical device having temperature compensation	349/72	345/101; 349/37

	Document ID	Issue Date	Pages	Title	Current OR	Current OR Current XRef
37	US 4761058 A		29	Biasing liquid crystal displays having capacitors and transistors	349/38	257/71; 257/72; 345/87; 349/42; 349/72
38	US 4319237 A 19820309	19820309	13	Brightness adjusting circuit of liquid crystal matrix panel for picture display	345/101	345/63; 349/33; 349/39
39	US 3907405 A	19750923	43	Liquid crystal display system 345/101	345/101	349/169; 349/72
40	EP 285402 A2	19881005	98	Display device.		345/101

	Document ID	Issue Date	Pages	Title	Current OR	Current XRef
	US 2002005724 A1	11 20020516	42	Liquid crystal display device	345/87	
7	US 20020057238 A1	38 20020516	74	Liquid crystal display apparatus	345/87	
က	US 20010040543 A1	13 20011115	1 1	Charge characteristic compensating circuit for liquid crystal display panel	345/87	
4	US 6496170 B1	20021217	29	quid crystal appar	345/87	345/101; 345/204; 345/204; 345/206; 345/92; 345/93; 345/99; 345/99; 349/172; 349/172; 349/33;
_ S	US 6452581 B1	. 20020917	13	y method L device L apparat	345/101	345/97
9	US 6414666 B1	. 20020702	31	Liquid crystal display device and method of driving a liquid crystal display element	345/95	345/87; 345/89; 345/94
7	US 6333728 B1	20011225	10	א ש פ פ	345/90	345/87; 349/72
ω	US 6329976 B1	. 20011211	7	Electro-optical display device with temperature-dependent drive means	345/101	
_ の	US 6326943 B1	. 20011204	65	Display device	345/101	345/97; 349/72

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	Document ID	Issue Date	Pages	Title	Current OR	Current XRef
10	US 6320571 B1	20011120	19	Bistable liquid crystal display device	345/204	345/205; 345/210; 345/211; 345/87; 345/88; 345/92; 345/95;
11	US 6075511 A	20000613	19	Drive voltages switched depending upon temperature detection of chiral smectic liquid crystal displays	345/101	345/94; 345/97
12	US 6067062 A	20000523	85	Light valve device	345/87	257/E27.111; 345/205
13	US 6037920 A	20000314	16	Liquid crystal apparatus and driving method therefor	345/87	345/101; 345/691; 345/94; 349/72
14	US 6020867 A	20000201	204	Display apparatus	345/87	345/905
15	US 5936604 A	19990810	25	בל אל הליקי	345/101	345/87; 345/88
16	US 5852430 A	19981222	19		345/101	345/88
17	5754154		49	Liquid crystal display apparatus	345/97	345/101
18	US 5748171 A	19980505	22	Liquid crystal display	345/101	345/88
19	US 5734367 A	19980331	11	Liquid crystal apparatus	345/101	345/99
20	5	: 0	49	Liquid crystal display apparatus	345/101	345/100; 345/98
21	US 5675356 A	19971007	29	Driving apparatus	345/101	/1
22	US 5657037 A	19970812	20	Display apparatus	345/94	345/78; 345/87
23	US 5602562 A	19970211	55	Liquid crystal apparatus and driving method	345/101	345/97

	Document	A	Issue Date	Pages	Title	Current OR	Current XRef
24	US 5592190		19970107	39	Liquid crystal display apparatus and drive method	345/89	345/101; 345/97
25	US 5506600) A	19960409	29	Driving apparatus	345/101	345/100
56	US 5471229	9 A	19951128	22	Driving method for liquid crystal device	345/89	345/101
27	US 5317332	A :	19940531	20	s for an suitable for panel	345/101	345/94
28	US 5283564	4 A	19940201	12	ystal ap re-deper ion	345/87	345/94; 349/72
29	5		19931005	56	Half tone liquid crystal display circuit with an A.C. voltage divider for drivers	345/89	345/101; 345/94
30	US 5233446	5 A	19930803	70	Display device	345/87	345/95
31	US 5041821	. A	19910820	54	Ferroelectric liquid crystal apparatus with temperature dependent DC offset voltage	345/101	345/94; 349/34; 349/37; 349/72
32	US 5033822	A .	19910723	10	Liquid crystal apparatus with temperature compensation control circuit	345/101	345/97; 349/72
33			19901009	70	Display control apparatus having a plurality of driving voltage supplying means	345/97	345/101
34	US 4952032	A.	19900828	82	Display device	345/101	349/72
35	US 4923285	. A	19900508	36	Drive apparatus having a temperature detector	345/101	345/97; 349/37; 349/72
36	US 4902107	Α,	19900220	16	Ferroelectric liquid crystal optical device having temperature compensation	349/72	345/101; 349/37

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	Document ID	Issue Date	Pages	Title	Current OR	Current OR Current XRef
37	US 4761058 A	19880802	29		349/38	257/71; 257/72; 345/87; 349/42; 349/72
38	US 4319237 A 19820309	19820309	13	ircuit ix lay	345/101	345/63; 349/33; 349/39
39	US 3907405 A 19750923 43	19750923	43	Liquid crystal display system 345/101	345/101	349/169; 349/72
40	EP 285402 A2	19881005	. 86	Display device.	***************************************	345/101

	Issue Date	e Page	Title	Document ID	Current OR	Current XRef
1	20030708	<u>م</u>	Method of driving liquid crystal display device	US 6590552 B1	345/92	345/100; 345/211; 345/212; 345/213; 345/87; 345/89; 345/94; 345/96;
7	20030603	21	Method for driving the TFT-LCD using multi-phase charge sharing	US 6573881 B1	345/92	345/100; 345/87; 345/90; 345/96
e e	20030401	77	e generating circuit, l light modulating t, display system, and g method for display	US 6542142 B2	345/90	345/98
4	20030325	31	Method of driving liquid crystal panel, and liquid crystal display apparatus	US 6538630 B1	345/94	345/92; 345/96
2	20021119	13	Method and circuit for data driving of a display	US 6483522 B1	345/690	345/89
9	20021015	11	Liquid crystal display thin film transistor driving circuit	US 6466191 B1	345/94	345/87
7	20020618	42	Active matrix liquid crystal display device having signal selectors and method of driving the same	US 6407728 B1	345/90	345/92

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80	20020430	35	Driving circuit of electro-optical device, driving method for electro-optical device, and electro-optical device and electronic equipment employing the electro-optical device	US 6380917 B2	345/89	345/210; 345/211; 345/95
Ø	20011218	30	display	US 6331844 B1	345/87	345/100; 345/204; 345/205; 345/206; 345/211; 345/212;
10	20011030	21	Driving method and circuit for pixel multiplexing circuits	US 6310594 B1	345/90	345/100; 345/214; 345/98
11	20010911	28	Method and circuit for driving display device	US 6288697 B1	345/87	345/94
12	20010807	22	ent display	US 6271812 B1	345/76	315/169.1; 315/169.2; 315/169.2; 345/204; 345/210; 345/210; 345/211; 345/77; 345/77;
13	20010612	7.7	Liquid crystal display device and its driving method	US 6246385 B1	345/87	345/100; 345/204

	Issue Date	Page s	Title	Document ID	Current OR	Current XRef
14	20010508	18	Liquid crystal display having different common voltages	US 6229510 Bl	345/87	9 9 9 9 9
15	20010313	28	tal display device	US 6201584 B1	349/38	345/55; 349/139; 349/51
16	20010109	29	circuit	US 6172663 B1	345/96	345/211; 345/99
17	20001121	56	type display ethod for me	US 6151006 A	345/94	345/691; 345/89
18	20001031	12	id crystal ing pixel uced drive	US 6140990 A	345/92	345/94; 345/98; 345/99
19	20000530	45	Active matrix type liquid crystal display	US 6069600 A	345/87	5/2
20	20000418	26	crystal display device ving method thereof	US 6052103 A	345/89	349/168; 349/169; 349/175; 349/185
21	20000222	43	matrix type liquid . display system and y method therefor	US 6028578 A	345/94	345/100
22	20000201	17	splay ving method	US 6020870 A	345/92	345/94
23	19991130	13	Driving method of liquid crystal display device	US 5995074 A	345/90	345/210; 345/95
24	19990907	T T	rer for a vith toggling	US 5949398 A	345/100	345/87; 345/96; 345/99; 377/64; 377/75

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	Issue Date	Page s	Title	Document ID	Current OR	Current XRef
25	19990810	29	Two-dimensional image display device and driving circuit	US 5936596 A	345/9	345/87
26	19990713	33	rrystal display with increased angle capability and of operating same	US 5923310 A	345/90	345/94
27	19990706	20	having common lation	US 5920298 A	345/87	345/100; 345/90
28	19990504	22	nit of liquid crystal and drive method of rystal display	US 5900854 A	345/99	345/92
29	19990202	15	thod for liquid splay of gate ructure	US 5867141 A	345/100	345/94; 345/96
30	19981229	44	natrix type liquid display system and method therefor	US 5854616 A	345/100	345/94
31	19981201	40		US 5844534 A	345/90	345/100; 345/103
32	19981124	<u>ه</u>	and device for driving to compensate for RC	US 5841415 A	345/90	345/92
33	19980811	16	g display r	US 5793344 A	345/87	345/904; 348/189; 348/191
34	19980804	o.	matrix liquid crystal / with reduced drive amplitudes	US 5790090 A	345/94	345/98; 345/99
35	19980630	35	Liquid crystal device with wide viewing angle characteristics	US 5774099 A	345/87	
36	19980505	33	Display device	US 5748169 A	345/100	345/90; 345/94; 345/98

t	Issue Date	Page 8	Title	Document ID	Current OR	Current XRef
37	19980428	10	Wiring structure and driving method for storage capacitors in a thin film transistor liquid crystal display device	US 5745090 A	345/90	345/92; 349/39
38	19971202	40	Liquid crystal device and driving method therefor	US 5694145 A	345/90	345/100; 345/98
39	19970708	62	Liquid crystal display device US	US 5646643 A	345/100	345/58; 345/94
40	19970408	61	Liquid crystal display device US	US 5619221 A	345/58	345/100; 345/94
41	19960716	12	Common electrode driving circuit for use in a display apparatus	US 5537129 A	345/90	345/94
42	19950718	64	ystal display device	US 5434599 A	345/100	345/212; 345/94
43	19950509	37	ر س	US 5414443 A	345/95	345/89
44	19921222	15	Method for improving the gradational display of an active type liquid crystal display unit	US 5173687 A	345/94	

	Issue Date	Page 8	Title	Document ID	Current OR	Current XRef
T	20030708	ō	Method of driving liquid crystal display device	US 6590552 B1	345/92	345/100; 345/211; 345/212; 345/213; 345/87; 345/89; 345/94; 345/96;
7	20021015	- - -	ırystal d ınsistor	US 6466191 B1	345/94	345/87
ъ	20011120	17	Driving circuit for liquid crystal display in dot inversion method	US 6320566 B1	345/99	345/100
4	20010911	28	Method and circuit for driving display device	US 6288697 B1	345/87	345/94
2	20010109	29	U	US 6172663 B1	345/96	345/211; 345/99
9	20001121	56	Active matrix type display device and a method for driving the same	US 6151006 A	345/94	345/691; 345/89
7	20000201	17	Liquid crystal display apparatus and driving method therefor	US 6020870 A	345/92	345/94
æ	19990907	11	Select line driver for a display matrix with toggling backplane	US 5949398 A	345/100	345/87; 345/96; 345/99; 377/64;
Ø	19990713	33	al display increased e capability and perating same	US 5923310 A	345/90	345/94
10	19990504	22	Drive unit of liquid crystal display and drive method of liquid crystal display	US 5900854 A	345/99	345/92

	Issue Date	Page 8	Title	Document ID	Current OR	Current XRef
11	19990202	15	***************************************	US 5867141 A	345/100	345/94; 345/96
12	19980804	D	Active matrix liquid crystal display with reduced drive pulse amplitudes	US 5790090 A	345/94	345/98; 345/99
13	19970708	62	Liquid crystal display device US	US 5646643 A	345/100	345/58; 345/94
14	19970408	61	Liquid crystal display device	US 5619221 A	345/58	345/100; 345/94
15	19961001	15	Method and circuit for driving a display device	US 5561442 A	345/94	345/208; 345/58
16	19950718	64	Liquid crystal display device US	US 5434599 A	345/100	345/212; 345/94
17	19950314	18	Driving method for a display device	US 5398043 A	345/94	345/92

	Туре	#	Hits	Search Text	DBs
н	BRS	1.2	30054	driving near method	USPAT; US EPO; JPO; IBM_TDB
7	BRS	Г.3	15792	pixel adj electrode	USPAT; US- EPO; JPO; IBM_TDB
3	BRS	L4	21889	common adj electrode	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
4	BRS	L5	26384	counter adj electrode	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
2	BRS	Гб	54503	switching near element	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
9	BRS	1.7	8569	(voltage or potential) and 3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
7	BRS	Г.8	1546	2 and 7	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
8	BRS	L9	3116	pixel near voltage	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
6	BRS	L12	556	(4 or 5) and LCD and 9	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
10	BRS	L13	179	2 and 12	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
11	BRS	L14	86	2 and 12	USPAT
12	BRS	L16	0	ON adj period	USPAT
13	BRS	L17	9	conductance adj period	USPAT

	Type	# 1	Hits	Search Text	DBs
14	BRS	L18	0	resistance near ON	•
15	BRS		286	345/55.ccls.	
16	BRS		1681	(345/87-90).ccls.	USPAT
17	BRS		518	(345/94).ccls.	USPAT
18	BRS	L22	294	(345/99).ccls.	USPAT
19	BRS	L23	1.7	14 and (21 or 22)	USPAT

	Document ID	Issue Date	Pages	Title	Current OR	Current XRef
1	US 20020033790 A1	20020321	33	Liquid crystal light valve and projection type liquid crystal display using such valve	345/90	
2	US 20020011994 A1	20020131	28	Matrix display apparatus, matrix display control apparatus, and matrix display drive apparatus	,345/204	
т	US 6483497 B1	20021119	62	with signal e having memory	345/100	345/103
. 4	US 6466192 B2	20021015	28	apparatus, control matrix display s	, 345/98	345/204; 345/99
5	US 6198225 B1	20010306	33	Ferroelectric flat panel displays	315/169.3	345/74.1
9	US 6191768 Bl	20010220	30	isplay apparatus, isplay control s, and matrix display paratus	345/98	345/204
7	US 6081305 A	20000627	33	Liquid crystal light valve and projection type liquid crystal display using such valve	349/5	349/111; 349/143; 349/42
8	US 5953002 A	19990914	32	Driving method for a liquid crystal display device	345/204	345/690; 345/89
6	US 5926156 A	19990720	82	Matrix type image display using backup circuitry	345/55	345/100
10	US 5914699 A	19990622	28	Matrix display apparatus matrix display control apparatus and matrix display drive apparatus	345/99	345/537
11	US 5900856 A	19990504	64	Matrix display apparatus, matrix display control apparatus, and matrix display drive apparatus	345/100	

	Document ID	Issue Date	Pages	Title	Current OR	Current XRef
12	US 5726677 A	19980310	30	Matrix display apparatus, matrix display control apparatus, and matrix display drive apparatus	345/99	345/537
13	US 5684505 A	19971104	86	Display device integrated with an input device	345/104	345/179
14	US 5621425 A	19970415	43	Liquid crystal display device 345/94	345/94	345/100
15	US 5579027 A	19961126	27	Method of driving image display apparatus	345/100	345/589; 345/698; 345/88; 345/99
16	US 5319447 A	19940607	21	Video control circuit for multimedia applications with video signal synchronizer memory	348/708	345/559; 345/600; 348/500; 348/578
17	US 4679043 A	19870707	22	Method of driving liquid crystal matrix display	345/103	349/158
18	US 4071855 A	19780131	<u>م</u>	Encoder and decoder for bandwidth compression	358/426.13	358/426.01

	Туре	#	Hits	Search Text	DBs
7	BRS		16277	temperature and LCD	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
2	BRS	1.2	2604	scanning near pulse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
m	BRS	L3	14917	scanning near signal	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
4	BRS	1.4	28913	gate adj voltage	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
5	BRS	L5	8806	gate adj pulse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
9	BRS	L6	53976	2 or 3 or 4 or 5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
7	BRS	L7	782	1 and 6	-Sn
8	BRS	1.8	244	345/101.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
6	BRS	1.9	2197	345/87.ccls.	
10	BRS	L10	18513	temperature adj variation	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
11	BRS	L11	66463	temperature near change	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
12	BRS	L12	82193	10 or 11	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB

	Туре	# 1	Hits	Search Text	DBs
13	BRS	L13	2419	8 or 9	1.1
14	BRS	L14	40	12 and 13 and 6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
15	BRS	L15	6202	pulse near modulation	.; 0;
16	BRS	116	17234	phase near modulation	_\$0 •
17	BRS	L17	80114	phase near shift	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
18	BRS	L18	32398	scanning near line	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
19	BRS	119	11349	column near line	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
20	BRS	120	2738	column near electrode	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
21	BRS	L21	5054	scanning near electrode	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
22	BRS	122	18	(18 or 21) and (19 or 20) and (16 or 17)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB